

### Amendments to the Specifications:

Please amend the first complete paragraph on page 3 as follows:

-- The substrate 22 may be formed from any suitable transparent material. Although other transparent materials may be used without departing from the scope of the present invention (e.g., zinc oxide (ZnO) or GaN), in one embodiment the transparent substrate 22 is sapphire. In one embodiment, the substrate 22 is entirely transparent to electromagnetic radiation from the sun, or solar electromagnetic radiation. --

Please amend the second complete paragraph on pages 3-4 as follows:

-- The TCC 24, commonly referred to as a front collector, collects electrical power from the GaInN junction layers 26 (in addition to the junction layers 32, 34 if either are included in the assembly 20) and directs the electrical power to the metal current collector bus 30, as described below. In one embodiment, the TCC 24 is entirely transparent to electromagnetic radiation from the sun, or solar electromagnetic radiation. The TCC 24 may be formed by any suitable method. For example as illustrated in Fig. 2, the TCC 24 is formed as a plurality of quantum wells (generally designated by 36) formed between a plurality of alternating layers 38 of two lattice matched, wide band gap crystalline materials, such as GaN and aluminum gallium nitride (AlGaIn). For example, the TCC 24 may be formed as a plurality of alternating layers 38 of GaN and Al<sub>0.1</sub>Ga<sub>0.9</sub>In, each having a thickness of about 100 Angstroms. The alternating layers 38 of GaN and AlGaIn are formed on the transparent substrate 22. Each quantum well 36 is formed at a corresponding interface between adjacent layers of the alternating layers 38 of GaN and AlGaIn. In some embodiments, a buffer layer 40 of GaN is formed on the transparent substrate 22, and the alternating layers 38 of GaN and AlGaIn are formed on the GaN buffer layer. Although the GaN buffer layer 40 may have any suitable thickness without departing from

the scope of the present invention, in one embodiment the GaN buffer layer has a thickness of about 1.5 microns. Additionally, the last layer formed on the substrate 22 of the alternating layers 38 of GaN and AlGaIn may be a layer of GaN to facilitate forming the GaInN junction layers 26 (in addition to the GaN junction layer 32, if it is included in the assembly 20) on the TCC 24.--

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- 3 -

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